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Central Intelligence Agency

Washington, D.C. 20505

Directorate of Intelligence

March 1985

Status of Syrian Coastal Defenses

Summary

Syria's defenses along its 150-kilometer coastline include unoccupied launch sites for recently acquired SSC-3 (Styx) and SSC-1b (Sepal) surface-to-surface cruise missile systems, conventional artillery, radar sites, and regularly spaced observation posts. The Syrians apparently are in the training phase with both cruise missile systems, and coastal defenses still must rely on inaccurate and aging 130-mm M-46, 100-mm KS-19, and 57-mm S-60 artillery pieces. When operationally deployed, however, the SSC-3 and SSC-1b, with ranges of 100 and 300 kilometers respectively, will fundamentally improve Syrian coastal defense capabilities. The missiles are more accurate, are mobile, and are capable of delivering large warheads. The mobility of the systems will reduce their vulnerability to air attack. More importantly, the range of the missile systems, in particular the 300-kilometer SSC-1b, will greatly increase Syrian reach into previously "safe" areas of

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Information available as of 1 December 1984 was used in this report. (U)

The author of this paper is Andrew Liepman, Office of Imagery Analysis. Comments and queries are welcome and may be directed to the Chief, Third World Forces Division, OIA on 863-3410 (secure 33-3840). (C)

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the eastern Mediterranean Sea. Acquisition of sophisticated coastal defense missiles--at a time of continuing US naval activity in the Mediterranean--will sharply increase the potential threat from the Syrian shore. (S

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Introduction

As part of their continuing effort to modernize Syria's military, the Soviets have recently provided the Syrians with two sophisticated coastal defense cruise missile systems--the SSC-3 (Styx) and SSC-1b (Sepal). These missile systems will modernize the Syrian coastal defenses, which presently depend on aging and inaccurate conventional artillery deployed along the coast. Particularly because of US-Israeli joint naval exercises in the eastern Mediterranean, the acquisition of these systems has caused increased concern about Syrian intentions, and about their capability to fire on and hit naval vessels operating off their coastline. (S [redacted] 25X1

This study addresses the land-based coastal defenses in Syria. These defenses are described in detail and their locations are shown in figure 1 at the end of the report. Although early warning radar sites are included on the map and its key, these sites are an integral part of Syrian air defenses, and are not addressed in detail. (S [redacted] 25X1

Land-Based Cruise Missile Systems

Syria has acquired two land-based cruise missile systems--the SSC-3 (Styx) and SSC-1b (Sepal)--from the Soviet Union since February 1984. Since the Syrians' land-based coastal defenses have consisted of short-range and relatively inaccurate conventional artillery, the introduction of these modern missile systems will greatly increase their coastal defense capability. The ranges of the missiles--100 kilometers for the SSC-3 and 300 kilometers for the SSC-1b--will also increase the threat to naval forces--including US--operating in the eastern Mediterranean Sea. In addition, the mobility of the cruise missiles, in contrast to the static positioning of coastal artillery, decreases their vulnerability to air attack. (S [redacted] 25X1

SSC-3 equipment was first identified in Syria in February 1984 at Qantarah Port Facilities, about 4 kilometers north of Latakia. To date, only two transporter-erector-launchers (TELs) have been identified in Syria. The SSC-3 system is believed to fire the most recent version of the Styx missile, the SS-N-2c, which is subsonic and has a range of approximately 100 kilometers. It has been manufactured with both radar and infrared seeker guidance systems. The SSC-3 is a highly mobile system, designed to fire either from a presurveyed position or from any level, open site. (S [redacted] 25X1

The presence of the SSC-1b system in Syria was confirmed [redacted] imagery of Qantarah Port Facility (figure 2). Only one TEL, one probable missile transporter, and two missile crates have been identified to date. This system fires the supersonic SS-N-3c missile, which has a range of approximately 300 kilometers and carries a 1,000-kilogram warhead. Like the SSC-3, the SSC-1b is mobile and does not require a presurveyed firing position. (S [redacted] 25X1 25X1 25X1 25X1

Although both missile systems can operate from almost any level, open area, the Syrians have constructed four fixed cruise missile launch sites on their coastline. The sites were constructed between June 1982 and September 1984 in the area between the ports of Latakia and Tartus. (S [redacted] 25X1

Each fixed cruise missile launch site in Syria consists of four large, circular launch positions with revetments to the rear which probably serve as vehicle or missile storage areas (figure 3). To date, no cruise missile-related equipment has been identified at any of the four sites. (S [redacted] 25X1

The Syrians are probably still in the training phase with both the SSC-3 and SSC-1b. The limited time period since the missiles were introduced into Syria and the small amount of cruise missile-related equipment identified to date in Syria suggest that neither system has been assimilated into the operational inventory. [redacted], one SSC-3 TEL and one possible SSC-1b TEL were observed in revetments at 25X1

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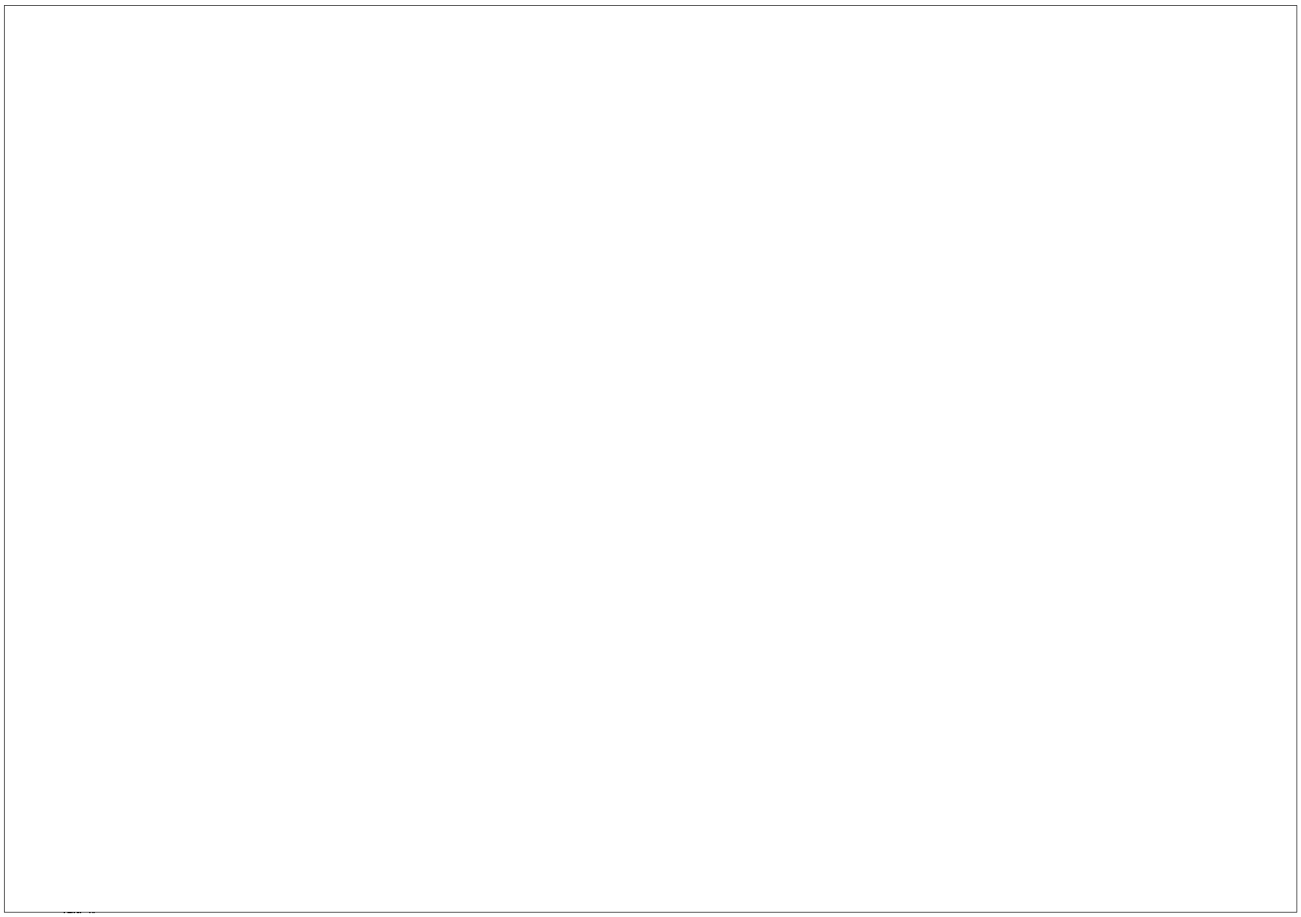

Qantarah Naval Base, where they had been stored. Although we cannot rule out the possibility that this was the first observed operational deployment of cruise missiles in Syria, the presence of one TEL from each of the two systems indicates that it was more likely related to a training and familiarization program. (S

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Coastal Artillery

Prior to the introduction of cruise missiles, Syria relied entirely on conventional artillery for land-based coastal defense. Syrian coastal artillery consists of two battalions of 130-mm M-46 field guns and three batteries of towed antiaircraft artillery (two 100-mm KS-19 and one 57-mm S-60 batteries) (figure 4). The AAA pieces are believed to be deployed in a direct-fire mode for two reasons: they are deployed in linear positions instead of the typical circular pattern of antiaircraft artillery, and the guns are deployed with surface search radars rather than the Fire Can fire control radars which are usually deployed with these types of AAA. The M-46 batteries use British-produced

CDR-431 radars, and the KS-19 and S-60 batteries use Sheet Bend/ Square Head radars. The artillery is deployed in batteries of four or six guns in fixed positions defending Syria's main ports. These guns are relatively inaccurate against ships, and are a viable threat only to targets at close range. The guns do not threaten vessels operating at distances further than a few kilometers from the Syrian coast. (S [redacted] 25X1

Coastal Radar Sites

The Defense Intelligence Agency (DIA) has reported that in addition to deploying Sheet Bend/Square Head surface search radars with the coastal defense artillery, the Syrians have deployed Low Sieve radars along the coast to provide low-altitude early warning. These are small, mobile radars, [redacted] 25X1 25X1

[redacted]

Coastal Observation Posts

In addition to the radar facilities, visual early warning is achieved through a series of observation posts along the Syrian coast. Observation posts are positioned 5 to 7 kilometers apart and are concentrated between the major ports and north of the Lebanese border. The posts are manned by coastal defense platoons. (S

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In previous DIA studies, Syrian observation posts have been reported at approximate locations. In our search of the Syrian coastline, we identified a unique type of building--a two-story structure with an observation tower on one corner--that the Syrians apparently use for coastal observation (figure 5). We identified this type of structure near many of the approximate locations and identified additional posts of similar design at several new locations. At least 13 of the 17 observation posts that were identified on the Syrian coast are of this design. (S

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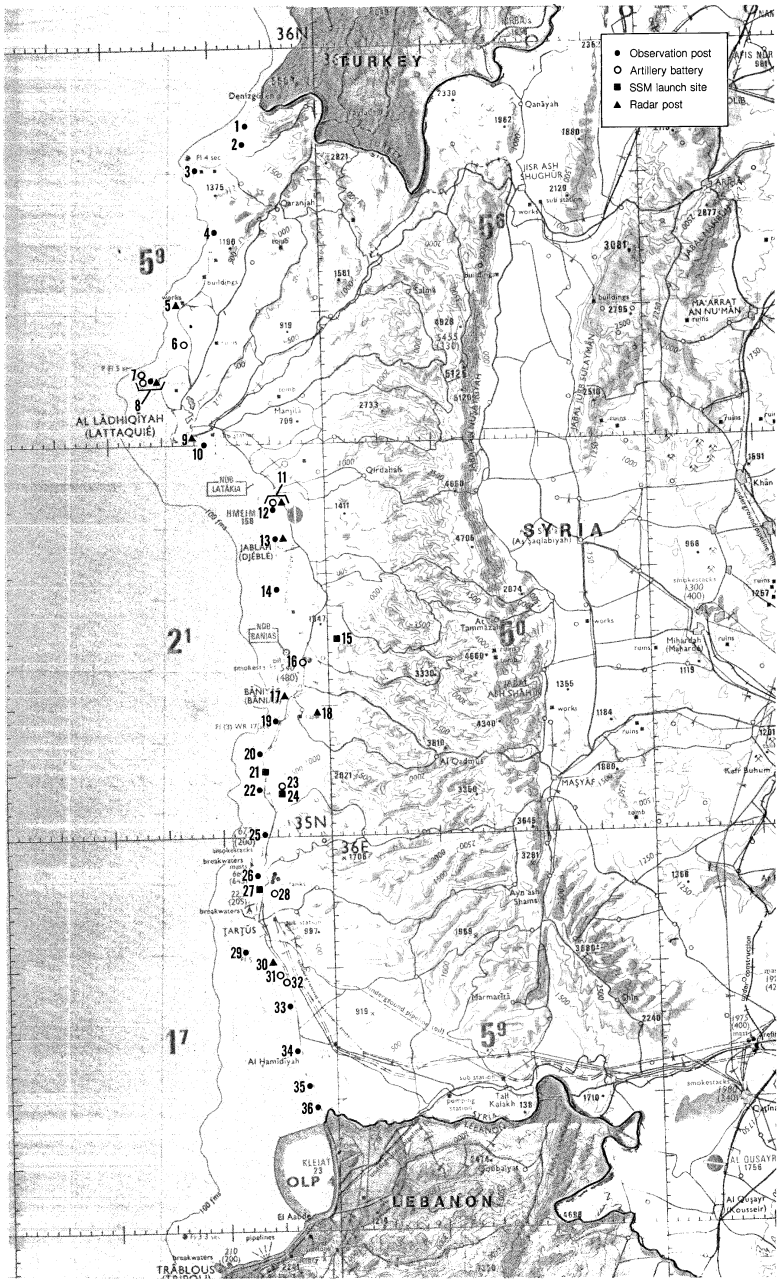
Figure 1
Syrian Coastal Defense Positions, December 1984



Key to Figure 1

Location	Function	Equipment/Structures
1 4 km south of Turkish border 35-45-10N 35-53-20E	Observation post	[a]Building with observation tower
2 6 km south of Turkish border 35-53-30N 35-53-15E	Observation post	Building
3 Rass El Bassite 35-51-10N 35-48-40E	Observation post	[a]Building with observation tower
4 Jebel Ez Ziara 35-46-20N 35-50-25E	Observation post	[a]Building with observation tower
5 West of Burj Islam 35-40-00N 35-46-55E	Radar post	Bunker
6 North of Wadi Jahannam 35-38-40N 35-47-15E	Artillery battery	Four 130-mm M-46 field guns
7 Ras Ibn Hani 35-35-10N 35-42-40E	Artillery battery	Four probable 57-mm S-60 AAA One Sheet Bend
8 Ras Ibn Hani 35-34-55N 35-42-45E	Artillery battery Observation post Radar post	Six 130-mm M-46 field guns One probable CDR-431
9 Latakia 35-30-25N 35-46-40E	Radar post	One Thin Skin A
10 Latakia 35-30-05N 35-46-40E	Observation post	Building
11 West of Hmeimim 35-25-10N 35-55-20E	Artillery battery Radar post	Four 130-mm M-46 field guns (deployed) Two M-46 (travel mode) One CDR-431 radar
12 West of Hmeimim 35-25-07N 35-54-55E	Observation post	[a]Building with observation tower Colocated with #11
13 Djeble 35-22-40N 35-55-10E	Observation post Radar post	Observation building with probable radar
14 Tall Sukas 35-18-30N 35-55-15E	Observation post	[a]Building with observation tower
15 Northeast of Baniyas 35-15-30N 36-00-30E	SSM launch site	Four positions in hills approximately 7 km inland
16 Northeast of Baniyas 35-13-00N 35-56-50E	Artillery battery	Four 100-mm KS-19 AAA One Sheet Bend
17 Southwest of Baniyas 35-10-30N 35-55-20E	Radar site	Unidentified
18 Baniyas 35-09-10N 35-58-00E	Air warning facility Joint Operations Command	Tall King B, Odd Pair, Side Net, Spoon Rest, Bar Lock
19 West of Adimah 35-08-50N 35-55-05E	Observation post	Building
20 Northwest of Bezzaq 35-06-20N 35-53-25E	Observation post	[a]Building with observation tower
21 Northwest of Bezzaq 35-06-30N 35-53-45E	Probable SSM launch site	Two sets of two launch positions on coast
22 'Arab Marqiyah 35-03-45N 35-53-15E	Observation post	[a]Building with observation tower
23 Southwest of Bezzaq 35-03-45N 35-55-10E	Artillery battery	Six 130-mm M-46 field guns
24 Southwest of Bezzaq 35-03-30N 35-55-05E	Possible SSM launch site	Four positions colocated with #23
25 West of Zamrin 35-00-30N 35-54-05E	Observation post	[a]Building with observation tower
26 North of Tartus 34-56-50N 35-52-55E	Observation post	Observation tower
27 Tartus 34-56-10N 35-52-55E	SSM launch site	Four-position site 1 km north of Tartus
28 Tartus 34-55-25N 35-54-30E	Artillery battery	Four 100-mm KS-19 AAA
29 Arwad Island 34-51-30N 35-51-50E	Observation post	[a]Building with observation tower
30 South of Tartus 34-50-40N 35-54-30E	Radar site	Flat Face, Squat Eye, Odd Pair, Spoon Rest D, Side Net
31 Tartus 34-50-00N 35-54-45E	Artillery battery	Four 130-mm M-46 field guns
32 Tartus 34-49-30N 35-56-30E	Artillery battery	Four 130-mm M-46 field guns
33 Al Hishah 34-47-05N 35-55-25E	Observation post	[a]Building with observation tower
34 North of Hamidiyah 34-44-30N 35-55-50E	Observation post	[a]Building with observation tower
35 Arab Jahash 34-41-50N 35-57-05E	Observation post	[a]Building with observation tower
36 Al Kharabah 34-39-45N 35-58-00E	Observation post	[a]Building with observation tower

[a]Unique type of building found on Syrian coast.

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